Tumour thrombus in the superior vena cava from anaplastic carcinoma of the thyroid: FDG-PET/CT imaging findings

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IMAGE OF THE MONTH

Tumour thrombus in the superior vena cava from anaplastic carcinoma of the thyroid: FDG-PET/CT imaging findings

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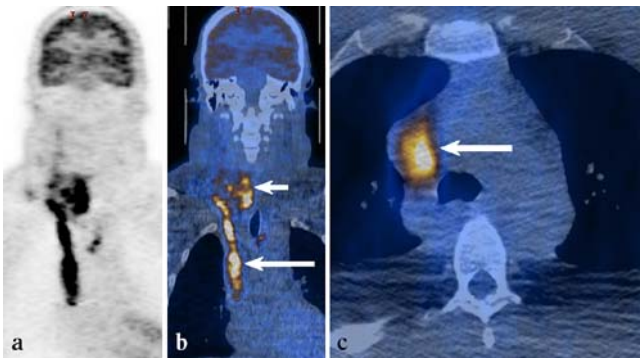
A 46-year-old male patient presented with a growing tumour in the neck, dyspnoea and upper inflow congestion. Biopsy showed an anaplastic thyroid cancer. This figure shows the coronal PET (a) and fused PET/CT images (b), with "worm-like" increased FDG uptake (*arrow*) extending from the primary tumour (*short arrow*) into the mediastinum and ending just above the right atrium. The transaxial fused PET/CT image (c) demonstrates that the FDG-active lesion (*arrow*) is located within the dilated superior vena cava. Vascular invasion of the superior vena cava was confirmed by MRI, angiography and Doppler ultrasound imaging. The patient was treated with corticosteroids, stent insertion and radiation therapy. The usefulness of PET and PET/CT in the detection of tumour thrombus has been reported for various tumours such as lung cancer, renal cell cancer, hepatocellular cancer and osteosarcoma [1–4]. Whole-body FDG-PET/CT is an excellent method for delineation of the tumour extent including vascular tumour invasion.



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